

REMARKS

The Examiner is thanked for the thorough examination and search of the subject.

Claims 163-208 are pending, wherein Claims 166 and 204-206 are currently amended.

Response to Claim Rejections under 35 U.S.C. 112

Applicants respectfully traverse the rejections for at least the reasons set forth below.

Response to Point 4 of Examiner's opinions

Claims 166 and 204 have been amended to comply with the requirement under 35 U.S.C. 112, first paragraph.

Response to Point 6 of Examiner's opinions

Claims 205 and 206 have been amended to comply with the requirement under 35 U.S.C. 112, second paragraph.

Response to Claim Rejections under 35 U.S.C. 102 and 103

Applicants respectfully traverse the rejections for at least the reasons set forth below.

Response to Claims 163-178

As previously added, independent claim 163 is recited below:

163. An electronic package comprising:
a substrate comprising silicon;
a die joined with said substrate; and
an upper metallization structure over said die, wherein said upper metallization structure comprises an electroplated metal.

Reconsideration of Claim 163 rejected under 35 U.S.C. 102(b) as being anticipated by Cole, Jr. et al (U.S. Patent No. 5,434,751) is requested based on the following remarks.

Applicants respectfully assert that the electronic package claimed in claim 163 patentably distinguishes over the citation by Cole, Jr. et al (U.S. Patent No. 5,434,751).

Cole, Jr. et al teach an electronic package comprising a substrate 11, a die 12 joined with the substrate 11, and an upper metallization structure 22 over the die 12. ~ See FIG. 2 or 3 ~

In the latest office action mailed Oct. 6, 2005, Examiner considers that Cole, Jr. et al disclose the substrate 11 comprising silicon. ~ *See line 5, page 4* ~ However, applicants do not think that Cole, Jr. et al disclose the substrate 11 comprising silicon. If Examiner thinks that Cole, Jr. et al do disclose the substrate 11 comprising silicon, the exact position where the subject matter of the substrate 11 comprising silicon is disclosed in the citation by Cole, Jr. et al is respectfully indicated.

Furthermore, Cole, Jr. et al fail to teach, hint or suggest that the upper metallization structure 22 may comprise an electroplated metal.

In the latest office action mailed Oct. 6, 2005, Examiner considers that "electroplated metal" is deemed as a "product by process" claim. ~ *See lines 9-22, page 4 through lines 1-2, page 5* ~ However, applicants respectfully traverse the examiner's opinion that "electroplated metal" is deemed as a "product by process" limitation.

Applicants consider that "electroplated metal" is a structural limitation because electroplated metal is a specific structure that can be identified by using bulk TEM X-ray diffraction to obtain a lattice-orientation result and then comparing the result with a lattice-orientation database.

The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can

only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. See, e.g., *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979) (holding "interbonded by interfusion" to limit structure of the claimed composite and noting that terms such as "welded," "intermixed," "ground in place," "press fitted," and "etched" are capable of construction as structural limitations.) ~ *Extracted from MPEP 2113* ~

For at least the foregoing reasons, applicants respectfully submit independent claim 163 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 164-178 patently define over the prior art as well.

Response to Claims 179-196

As previously added, independent claim 179 is recited below:

179. An electronic package comprising:
a substrate comprising silicon;
a die joined with said substrate comprising multiple internal circuits; and
an upper metallization structure over said die, wherein said upper metallization structure comprises a portion connecting said multiple internal circuits.

Reconsideration of Claim 179 rejected under 35 U.S.C. 102(b) as being anticipated by Cole, Jr. et al (U.S. Patent No. 5,434,751) is requested based on the following remarks.

Applicants respectfully assert that the electronic package claimed in claim 179 patentably distinguishes over the citation by Cole, Jr. et al (U.S. Patent No. 5,434,751).

Cole, Jr. et al teach an electronic package comprising a substrate 11, a die 12 joined with the substrate 11, and an upper metallization structure 22 over the die 12. ~ See FIG. 2 or 3 ~

In the latest office action mailed Oct. 6, 2005, Examiner considers that Cole, Jr. et al disclose the substrate 11 comprising silicon. ~ See line 5, page 4 ~ However, applicants do not think that Cole, Jr. et al disclose the substrate 11 comprising silicon. If Examiner thinks that Cole, Jr. et al do disclose the substrate 11 comprising silicon, the exact position where the subject matter of the substrate 11 comprising silicon is disclosed in the citation by Cole, Jr. et al is respectfully indicated.

Furthermore, Cole, Jr. et al fail to teach, hint or suggest that the upper metallization structure 22 may comprise a portion connecting multiple internal circuits of the die 12.

For at least the foregoing reasons, applicants respectfully submit independent claim 179 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 180-196 patentably define over the prior art as well.

Response to Claims 197-208

As previously added, independent claim 197 is recited below:

197. An electronic component comprising:
a die having a top surface at a horizontal level, wherein said die comprises multiple internal circuits; and
an upper metallization structure over said horizontal level, wherein said upper metallization structure comprises a portion connecting said multiple internal circuits and used to provide a ground voltage, wherein said upper metallization structure extends outside beyond an edge of said die.

Reconsideration of Claim 197 rejected under 35 U.S.C. 102(b) as being anticipated by Cole, Jr. et al (U.S. Patent No. 5,434,751) is requested based on the following remarks.

Applicants respectfully assert that the electronic component claimed in claim 197 patentably distinguishes over the citation by Cole, Jr. et al (U.S. Patent No. 5,434,751).

Cole, Jr. et al teach an electronic component comprising a die 12 having a top surface at a horizontal level, and an upper metallization structure 22, 32 and 44 over the horizontal level, wherein the upper metallization structure 22, 32 and 44 extends outside beyond an edge of the die 12. ~ See FIG. 2 or 3 ~

However, Cole, Jr. et al fail to teach, hint or suggest that the upper metallization structure 22, 32 and 44 may comprise a portion connecting multiple internal circuits of the die 12, which claimed in claim 197.

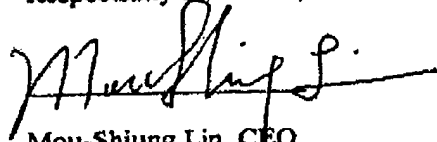
For at least the foregoing reasons, applicants respectfully submit independent claim 179 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 180-196 patently define over the prior art as well.

CONCLUSION

Some or all of the pending claims are believed to be in condition for allowance. Accordingly, allowance of the claims and the application as a whole are respectfully requested.

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Respectfully submitted,



Mou-Shiung Lin, CEO
For and on behalf of MEGIC
Corporation